53	$\left\langle \right\rangle_{2}^{1}$
\mathcal{O}	
1	4
Al	5
11	6
	7
	8
	1
Х	2
	3
]
J	2
	_

1. (Amended) A method for improving receive performance in a data network, the method comprising:

receiving up to a plurality of indications denoting the start of frame transmission on a corresponding plurality of communication links;

identifying that [the] at least one [or more] of the received indications denote the start of a flow; and

dedicating a receive buffer from a plurality of receive buffers to receive all frames associated with the identified flow.

- 2. (Amended) The method of claim 1, wherein identifying the start of flow [involves] includes analyzing information embedded within each of the received frames to determine source and destination information associated with said frames.
- 3. (Amended) The method of claim 1, further comprising [the step of]
 determining whether the identified flow requires preservation of transmission order.

AZ

3

4

5

6

(Amended) An apparatus comprising:

a plurality of buffers, each [having] <u>buffer including</u> a plurality of records; and a network interface[,] coupled to the [buffer] <u>plurality of buffers</u>, <u>the network</u> <u>interface</u> to receive a plurality of frames, [from a plurality of communication links of a data

network,] to identify whether the received frames indicate a flow condition and to dedicate a

buffer from the plurality of buffers to accommodate all frames received associated with the

7 identified flow condition

13 1 Cm/2

13. (Amended) The apparatus of claim 12, wherein the network interface assigns a pointer value to each frame of the identified flow corresponding to commencement of

3 transmission of the frame to create a list of pointer values associated with each frame corresponding to transmission order if it is determined that preservation of frame 4 transmission order is required[,]. 5 (Amended) The apparatus of claim [19] 9, wherein the plurality of frames are 1 14. received from a plurality of communication links that are part of an Ethernet network. 2 (Amended) A data network comprising: 15. a first network device; and 2 a second network device communicatively coupled with the first [one or more] network [devices] device, the second network device including: one or more buffers, each buffer having a plurality of records; and 5 a network interface [,] coupled to the buffers, the network interface to receive a 6 plurality of frames from at least a [plurality of] communication [links of] <u>link</u> 7 associated with the data network, to identify whether the received frames indicate 8 existence of a flow condition, and to dedicate a buffer from the plurality of buffers to 9 accommodate all frames received associated with the identified flow condition. 10 (Amended) The data network of claim 15, wherein the network interface of 16. 1 the second network device promotes frames from the dedicated buffer in the order received, 2 unless it is determined that preservation of frame transmission order is required. 3 (Amended) The data network of claim 16, wherein the network interface of 17. 1 the second network device determines whether preservation of frame transmission order is 2

3

required by analyzing protocol related information embedded within the frames.



1

18. (Amended) The data network of claim 16, wherein the network interface of the second network device assigns a pointer value to each received frame of a flow condition denoting relative order of commencement of transmission, and promotes each frame in order of the pointer value rather than the order in which the frames are received, when preservation of frame transmission order is required.

19. (Amended) The data network of claim 15, wherein the network interface of the second network device identifies the flow condition by analyzing source and destination information embedded within the received frames.

Please add new claims 21-24 as follows:



3

(New) A medium having embodied thereon a program for processing by a

network device, the program comprising:

a module to receive an indication to denote commencement of a flow of frame transmissions; and

a module to indicate at least one receive buffer to receive all frames associated with the flow.

- 1
- 22. (New) The medium of claim 21, wherein the program further comprises a
- 2 module to promote frames of the received flow in the order received, unless it is determined
- 3 flow requires preservation of frame order.

23. (New) The medium of claim 21, wherein the program further comprises a

- 2 module to assign a pointer value to each frame of the identified flow corresponding to
- 3 commencement of transmission, creating a list of pointer values corresponding to

transmission order if it is determined that the identified flow requires preservation of
transmission order.

24. (New) The apparatus of claim 14, wherein the network interface includes
a multiplexer coupled to the plurality of buffers;
a physical link coupled to each communication link of the plurality of communication
links; and
a medium access controller coupled between a corresponding physical link and the

6

multiplexer.